



PATENT  
Attorney Docket No.: DNA1170-2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Frudakis and Shriver  
Application No.: 10/644,594  
Filing Date: August 19, 2003  
Title: COMPOSITIONS AND METHODS FOR INFERRING ANCESTRY

Art Unit: 1634  
Examiner: Not Yet Assigned  
Conf. No.: 6207

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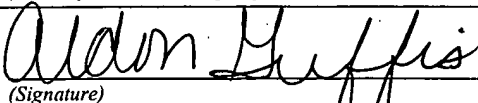
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. § 1.97, enclosed are references relating to the above-identified application. For the convenience of the Examiner, the references are listed on the attached Form PTO-1449 and a copy of each reference is enclosed herewith.

It is respectfully requested that the references be considered in the examination of this application and their consideration be made of written record in the application file.

CERTIFICATION UNDER 37 CFR §1.8	
I hereby certify that the documents referred to as enclosed herein are being deposited with the United States Postal Service as first class mail on this date, <b>May 17, 2004</b> , in an envelope addressed to: Mail Stop MISSING PARTS, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
<u>Aldon Griffis</u> (Name of Person Mailing Paper)	
 (Signature)	<b>May 17, 2004</b> (Date)

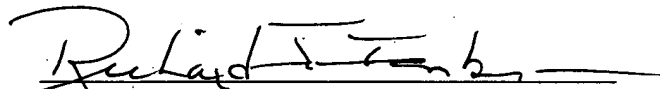
In re Application of:  
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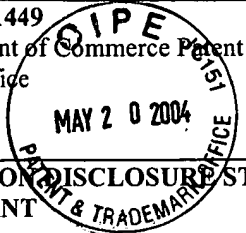
No fee is deemed necessary in connection with the filing of this Information Disclosure Statement, because it is being filed prior to the mailing of a first office action on the merits of the above-identified application. However, if any fee is required, authorization is hereby given to charge the amount of any such fee, or credit any overpayment, to Deposit Account No. 50-1355.

Respectfully submitted,

Date: May 17, 2004

  
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<b>FORM PTO-1449</b> U.S. Department of Commerce Patent and Trademark Office 	<b>Docket No.:</b> DNA1170-2	<b>Application No.:</b> 10/644,594
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### U.S. PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE

### FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

	AA	Akey et al., "Melting Curve Analysis of SNPs (McSNP®): A Gel-Free and Inexpensive Approach for SNP Genotyping", <i>BioTechniques</i> 2001 Feb; 30(2): 358-67
	AB	Akey et al., "Interaction between the melanocortin-1 receptor and <i>P</i> genes contributes to inter-individual variation in skin pigmentation phenotypes in a Tibetan population" <i>Hum Genet.</i> 2001 June; 108(6):516-520
	AC	Boissy et al., "Mutation in and lack of expression of tyrosinase-related protein-1 (TRP-1) in melanocytes from an individual with brown oculocutaneous albinism: a new subtype of albinism classified as "OCA3"", <i>Am J Hum Genet.</i> 1996 June; 58(6):1145-56
	AD	Bonilla et al., "Admixture in the Hispanics of the San Luis Valley, Colorado, and its implications for complex trait gene mapping", <i>Ann Hum Genet.</i> March 2004; 68(Pt 2):139-53
	AE	Box et al., "Melanocortin-1 receptor genotype is a risk factor for basal and squamous cell carcinoma", <i>J Invest Dermatol.</i> 2001 Feb; 116(2):224-9
	AF	Briscoe et al., "Linkage disequilibrium in admixed populations: applications in gene mapping", <i>J Hered.</i> 1994 Jan-Feb; 85(1):59-63

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
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**EXAMINER:** Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	AG	Burroughs et al., "Racial and ethnic differences in response to medicines: towards individualized pharmaceutical treatment", <i>J Natl Med Assoc.</i> 2002 Oct; 94(10 Suppl):1-26
	AH	Chakraborty et al., "Admixture as a tool for finding linked genes and detecting that difference from allelic association between loci", <i>Proc Natl Acad Sci U S A.</i> 1988 Dec; 85(23):9119-23
	AI	Chakraborty et al., "'Unique' alleles in admixed populations: a strategy for determining 'hereditary' population differences of disease frequencies", <i>Ethn Dis.</i> 1991; 1(3):245-56
	AJ	Chakraborty, "Multiple alleles and estimation of genetic parameters: computational equations showing involvement of all alleles", <i>Genetics.</i> 1992 Jan; 130(1):231-4
	AK	Cohen, "Redheads and pain", <i>The Scientist</i> , 2002 Nov; 16(22): 10
	AL	Collins-Schramm et al., "Ethnic-Difference Markers for Use in Mapping by Admixture Linkage Disequilibrium", <i>Am J Hum Genet.</i> 2002 Mar; 70(3):737-50
	AM	Devlin et al., "Genomic control for association studies", <i>Biometrics.</i> 1999 Dec; 55(4):997-1004
	AN	Durham-Pierre et al., "Estimation of carrier frequency of a 2.7 kb deletion allele of the P gene associated with OCA2 in African-Americans", <i>Hum Mutat.</i> 1996; 7(4):370-3
	AO	Fernández et al., "Association of African genetic admixture with resting metabolic rate and obesity among women", <i>Obes Res.</i> 2003 Jul; 11(7):904-11
	AP	Flanagan et al., "Pleiotropic effects of the melanocortin 1 receptor (MC1R) gene on human pigmentation", <i>Hum Mol Genet.</i> 2000 Oct 12; 9(17):2531-7
	AQ	Frudakis et al., "A classifier for the SNP-based inference of ancestry", <i>J Forensic Sci.</i> 2003 Jul; 48(4):771-82
	AR	Frudakis et al., "Sequences associated with human iris pigmentation", <i>Genetics.</i> 2003 Dec; 165(4):2071-83

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AS	Halder et al., "Measuring and using admixture to study the genetics of complex diseases", <i>Human Genomics</i> . 2003 Nov; 1(1):52-62
AT	Hanis et al, "Individual admixture estimates: disease associations and individual risk of diabetes and gallbladder disease among Mexican-Americans in Starr County, Texas", <i>Am J Phys Anthropol</i> . 1986 Aug; 70(4):433-41
AU	Jorde, "Linkage disequilibrium and the search for complex disease genes", <i>Genome Res</i> . 2000 Oct; 10(10):1435-44
AV	Kanetsky et al., "A polymorphism in the agouti signaling protein gene is associated with human pigmentation", <i>Am J Hum Genet</i> . 2002 Mar; 70(3):770-5
AW	Merriwether et al., "Mitochondrial versus nuclear admixture estimates demonstrate a past history of directional mating", <i>Am J Phys Anthropol</i> . 1997 Feb; 102(2):153-9
AX	McKeigue, "Mapping genes that underlie ethnic differences in disease risk: methods for detecting linkage in admixed populations, by conditioning on parental admixture", <i>Am J Hum Genet</i> . 1998 Jul; 63(1):241-51
AY	McKeigue et al., "Estimation of admixture and detection of linkage in admixed populations by a Bayesian approach: application to African-American populations", <i>Ann Hum Genet</i> . 2000 Mar; 64(Pt 2):171-86
AZ	Nordborg et al., "Linkage disequilibrium: what history has to tell us", <i>Trends Genet</i> . 2002 Feb; 18(2):83-90
BA	Oetting et al., "Molecular basis of albinism: mutations and polymorphisms of pigmentation genes associated with albinism", <i>Hum Mutat</i> . 1999; 13(2):99-115
BB	Ooi et al., "Altered expression of a novel adaptin leads to defective pigment granule biogenesis in the Drosophila eye color mutant garnet", <i>EMBO J</i> . 1997 Aug; 16(15):4508-18
BC	Parra et al., "Estimating African American admixture proportions by use of population-specific alleles", <i>Am J Hum Genet</i> . 1998 Dec; 63(6):1839-51

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BD	Parra et al., "Ancestral proportions and admixture dynamics in geographically defined African Americans living in South Carolina", <i>Am J Phys Anthropol.</i> 2001 Jan; 114(1):18-29
BE	Pritchard et al., "Inference of population structure using multilocus genotype data", <i>Genetics.</i> 2000 Jun; 155(2):945-59
BF	Pritchard et al., "Case-control studies of association in structured or admixed populations", <i>Theor Popul Biol.</i> 2001 Nov; 60(3):227-37
BG	Rebbeck et al., " <i>P</i> gene as an inherited biomarker of human eye color", <i>Cancer Epidemiol Biomarkers Prev.</i> 2002 Aug; 11(8):782-4
BH	Risch et al., "The future of genetic studies of complex human diseases", <i>Science.</i> 1996 Sep; 273(5281):1516-7
BI	Robbins et al., "Pigmentation phenotypes of variant extension locus alleles result from point mutations that alter MSH receptor function", <i>Cell.</i> 1993 Mar; 72(6):827-34
BJ	Rosenberg et al., "Genetic structure of human populations", <i>Science.</i> 2002 Dec; 298(5602):2381-5
BK	Shriver et al., "Ethnic-affiliation estimation by use of population-specific DNA markers", <i>Am J Hum Genet.</i> 1997 Apr; 60(4):957-64
BL	Shriver et al., "Skin pigmentation, biogeographical ancestry and admixture mapping", <i>Hum Genet.</i> 2003 Apr; 112(4):387-99
BM	Smith et al., "A high-density admixture map for disease gene discovery in african Americans", <i>Am J Hum Genet.</i> 2004 May; 74(5):1001-13
BN	Smith et al., "Melanocortin 1 receptor variants in an Irish population", <i>J Invest Dermatol.</i> 1998 Jul; 111(1):119-22
BO	Stephens et al., "Mapping by admixture linkage disequilibrium in human populations: limits and guidelines", <i>Am J Hum Genet.</i> 1994 Oct; 55(4):809-24

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	BP	Sturm et al., "Human pigmentation genes: identification, structure and consequences of polymorphic variation", <i>Gene</i> . 2001 Oct 17; 277(1-2):49-62
	BQ	Terwilliger et al., "A <i>bias</i> -ed assessment of the use of SNPs in human complex traits", <i>Curr Opin Genet Dev</i> . 2002 Dec; 12(6):726-34
	BR	Tseng et al., Genetic admixture and gallbladder disease in Mexican Americans", <i>Am J Phys Anthropol</i> . 1998 Jul; 106(3):361-71

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